

CIRCUITS, SYSTEMS AND METHODS FOR PERFORMING BRANCH  
PREDICTIONS BY SELECTIVELY ACCESSING BIMODAL  
AND FETCH-BASED BRANCH HISTORY TABLES

ABSTRACT OF THE DISCLOSURE

Branch prediction circuitry including a bimodal branch history table, a fetch-based branch history table and a selector table is provided. The local branch history table includes a plurality of entries each for storing a prediction value and accessed by selected bits of a branch address. The fetch-based branch history table included a plurality of entries for storing a prediction value and accessed by a pointer generated from selected bits of the branch address and bits from a history register. The selector table includes a plurality of entries each for storing a selection bit and accessed by a pointer generated from selected bits from the branch address and bits from the history register, each selector bit is used for selecting between a prediction value accessed from the local history table and a prediction value accessed from the fetch-based history table.